

# **MARCH 2015**

# **ECOLOGICAL**

# **CONDITIONS UPDATE**

**Terrie Bates**

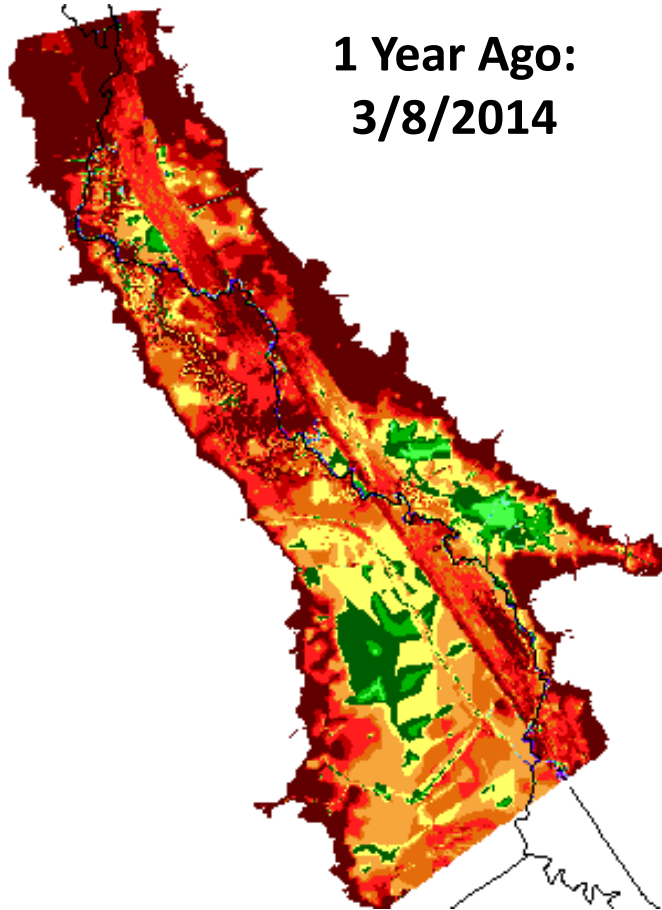
**Director, Water Resources Division**

**Governing Board Meeting**

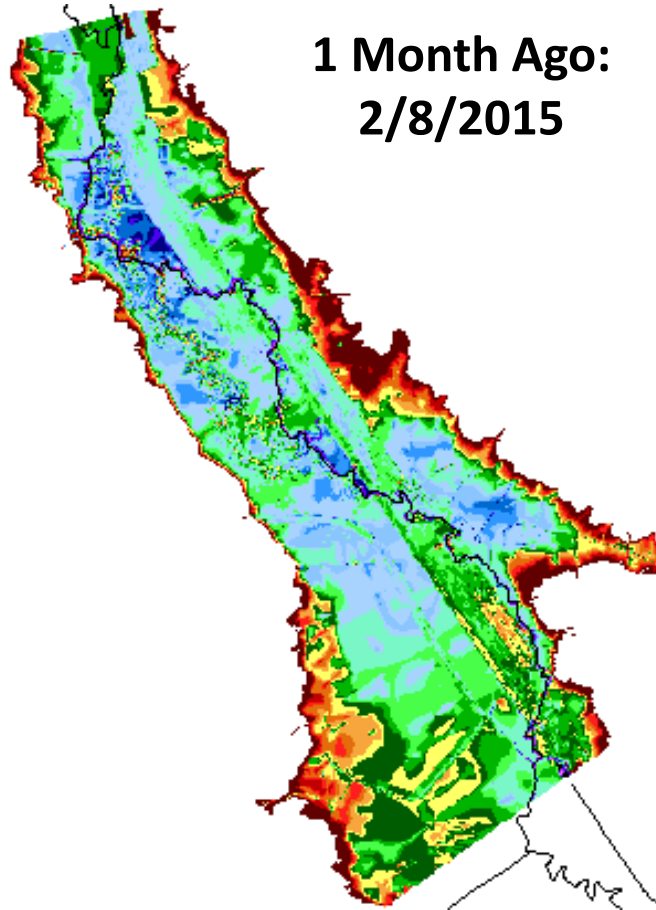
**March 12, 2015**

# KISSIMMEE RIVER (PHASE I RESTORATION AREA) MONTHLY WATER DEPTH MAPS

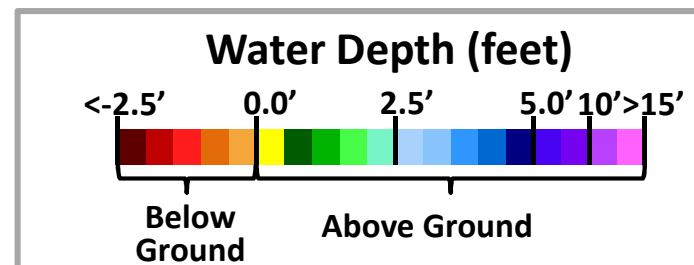
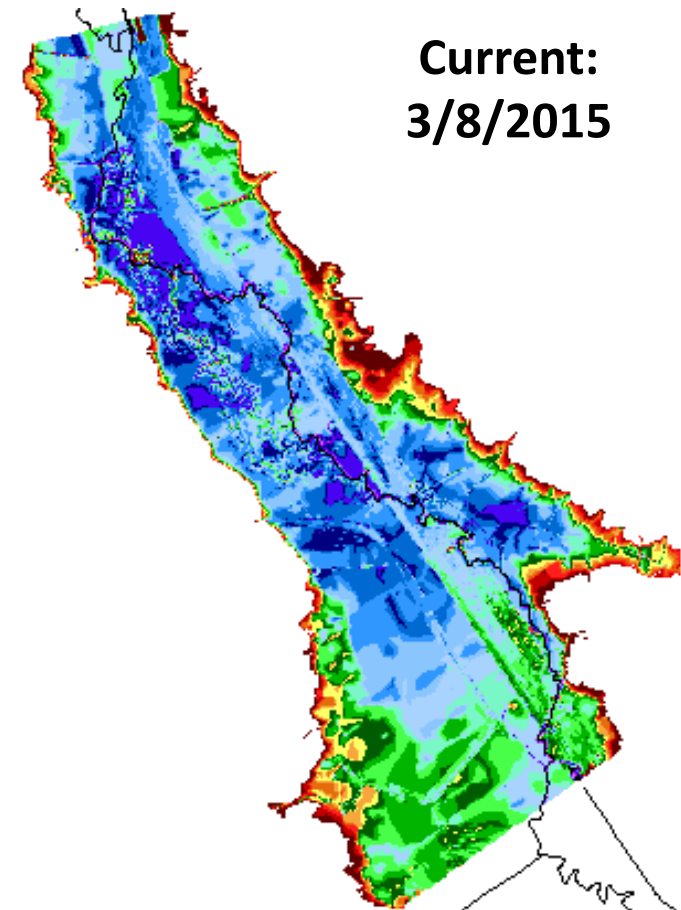
1 Year Ago:  
3/8/2014



1 Month Ago:  
2/8/2015



Current:  
3/8/2015





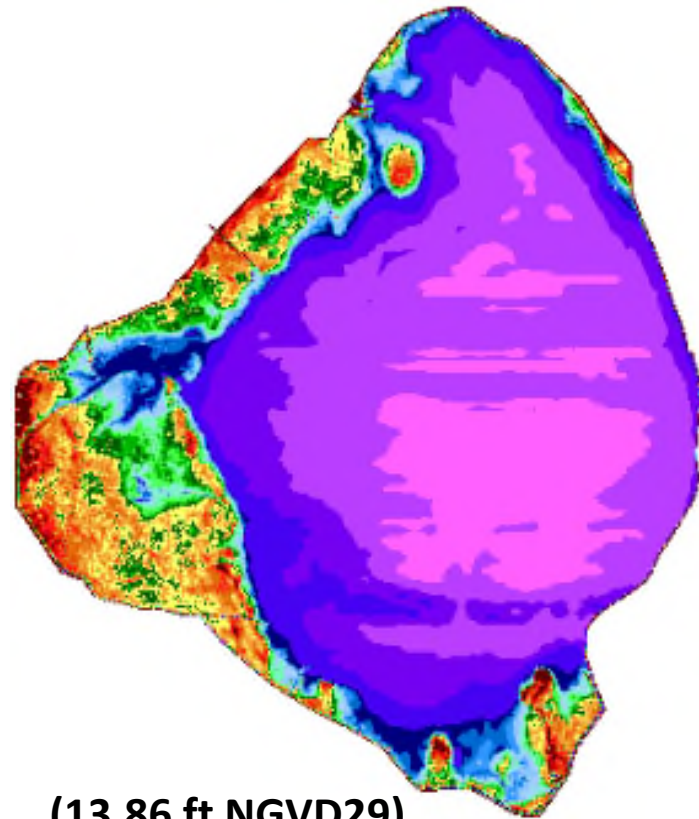
# LAKE OKEECHOBEE

## MONTHLY WATER DEPTH MAPS

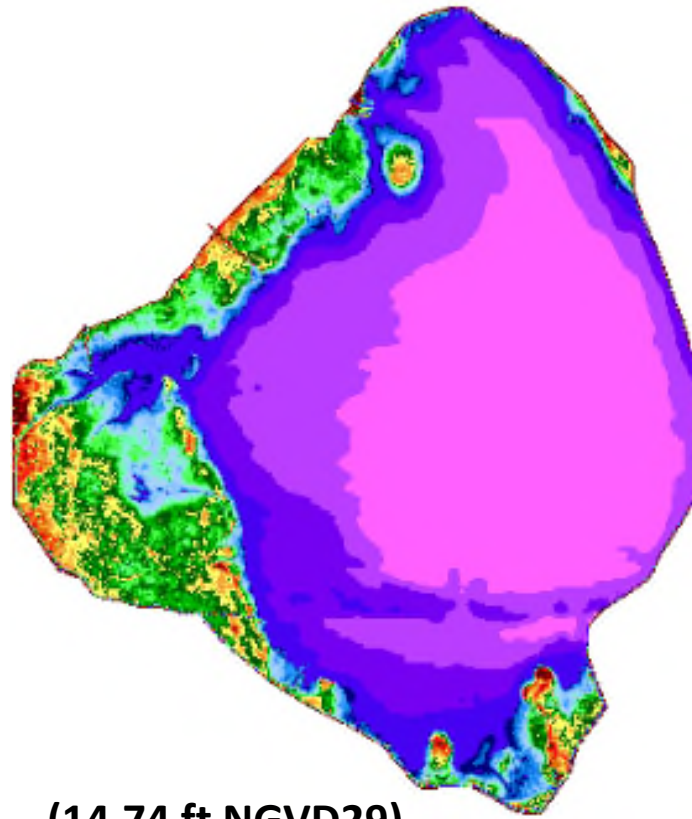
1 Year Ago: 03/09/2014

1 Month Ago: 02/09/2015

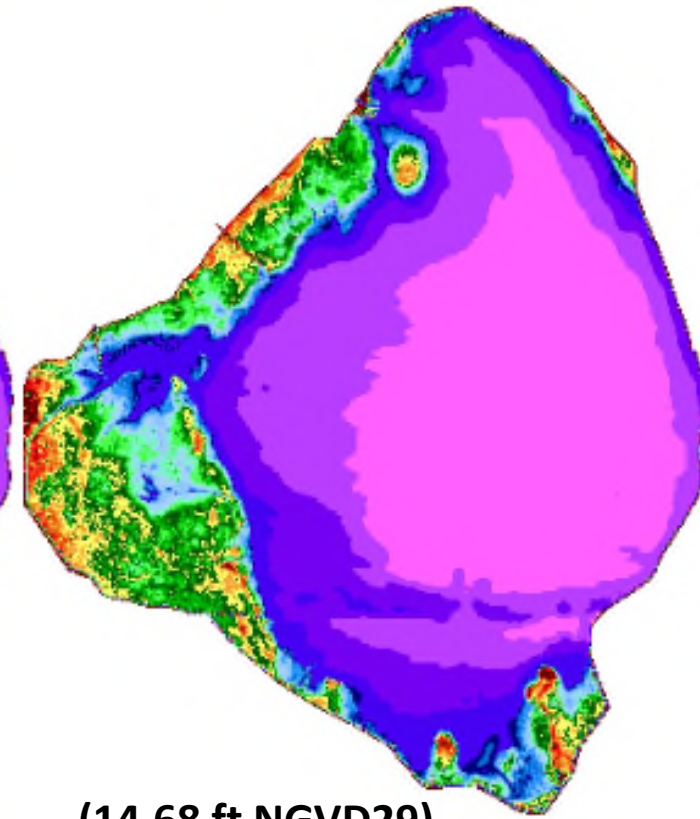
Current: 03/09/2015



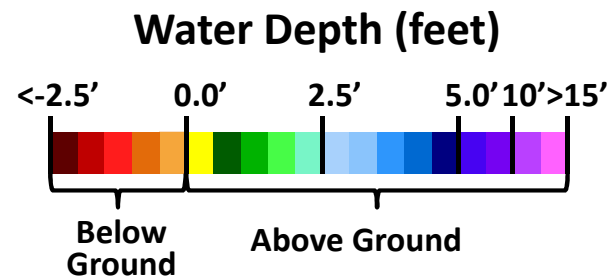
(13.86 ft NGVD29)



(14.74 ft NGVD29)



(14.68 ft NGVD29)



## ST. LUCIE ESTUARY



### Weekly Average Inflow Mar. 3 - Mar. 9, 2015

Inflow from Lake	758 cfs
C-44 Basin Inflow	92 cfs
Tenmile Creek	109 cfs
C-23	30 cfs
C-24	63 cfs
Tidal Basin Inflow	182 cfs
<b>Total</b>	<b>1234 cfs</b>

Data provisional and  
subject to change

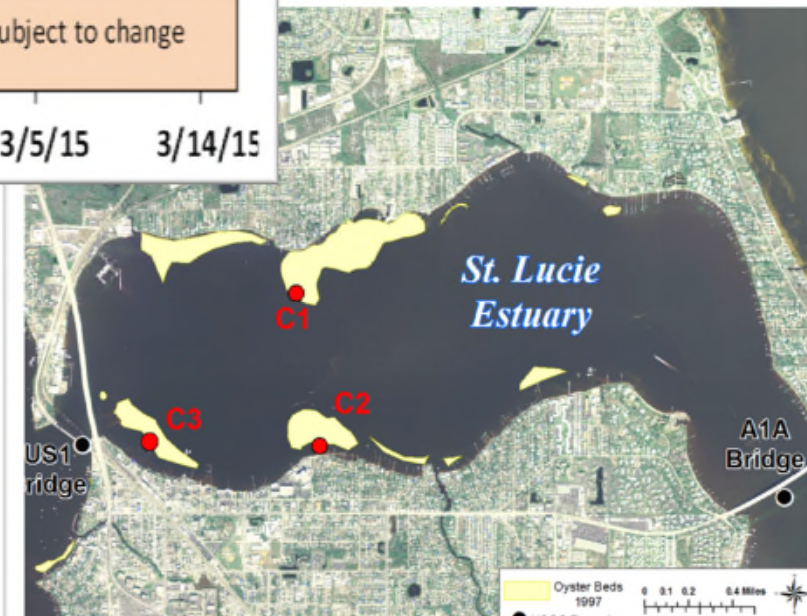
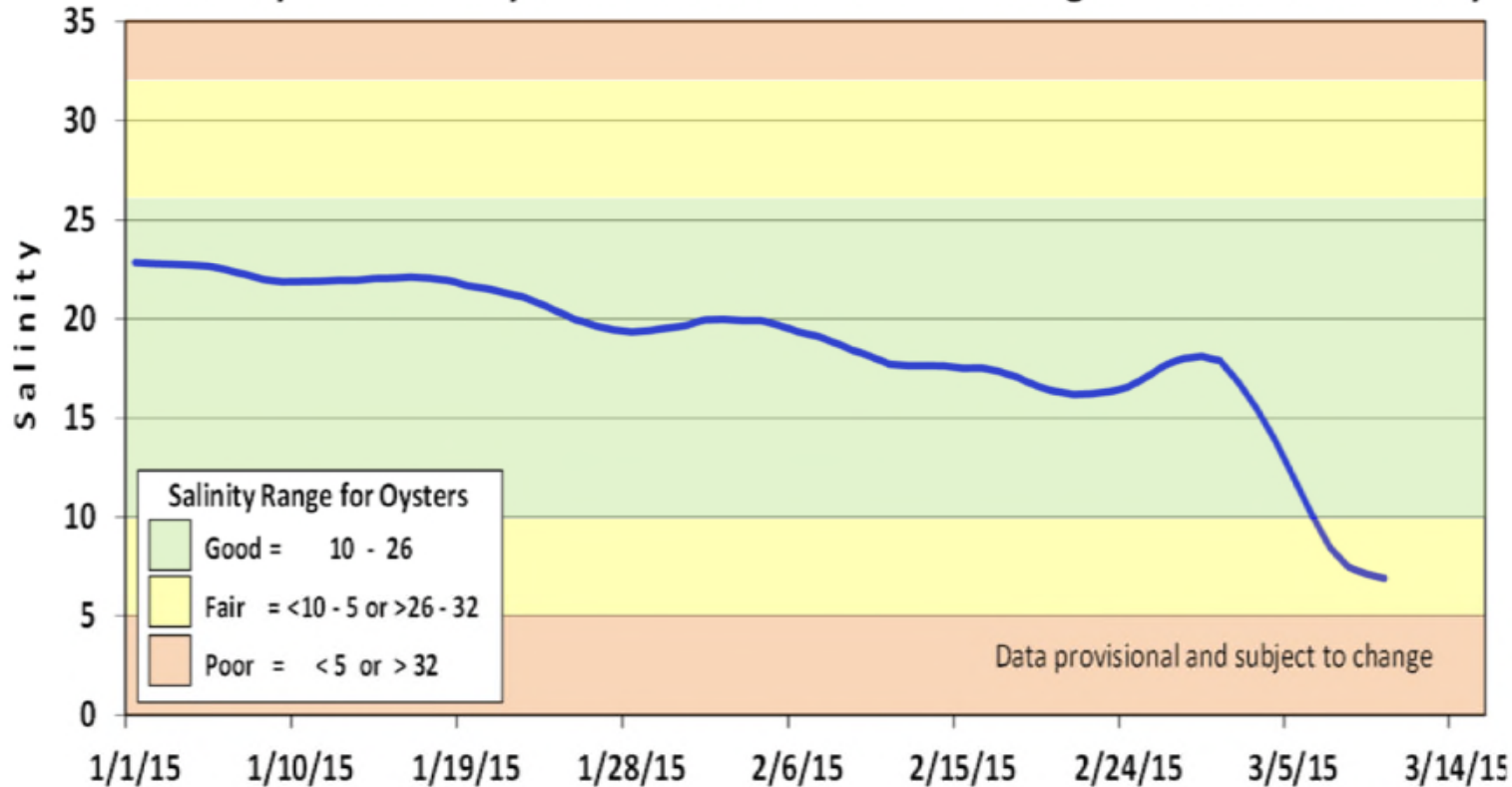
Total Flow (cfs)

1-Mar 1-Apr 1-May 1-Jun 1-Jul 1-Aug 1-Sep 1-Oct 1-Nov 1-Dec 1-Jan 1-Feb 1-Mar

■ Inflow from Lake ■ C-44 Basin Runoff ■ Inflow from C-24, C23, and Tenmile Creek ■ Tidal Basin Inflow

# ST. LUCIE ESTUARY - OYSTERS

Seven day mean salinity of the water column at US1 Bridge in the St. Lucie Estuary



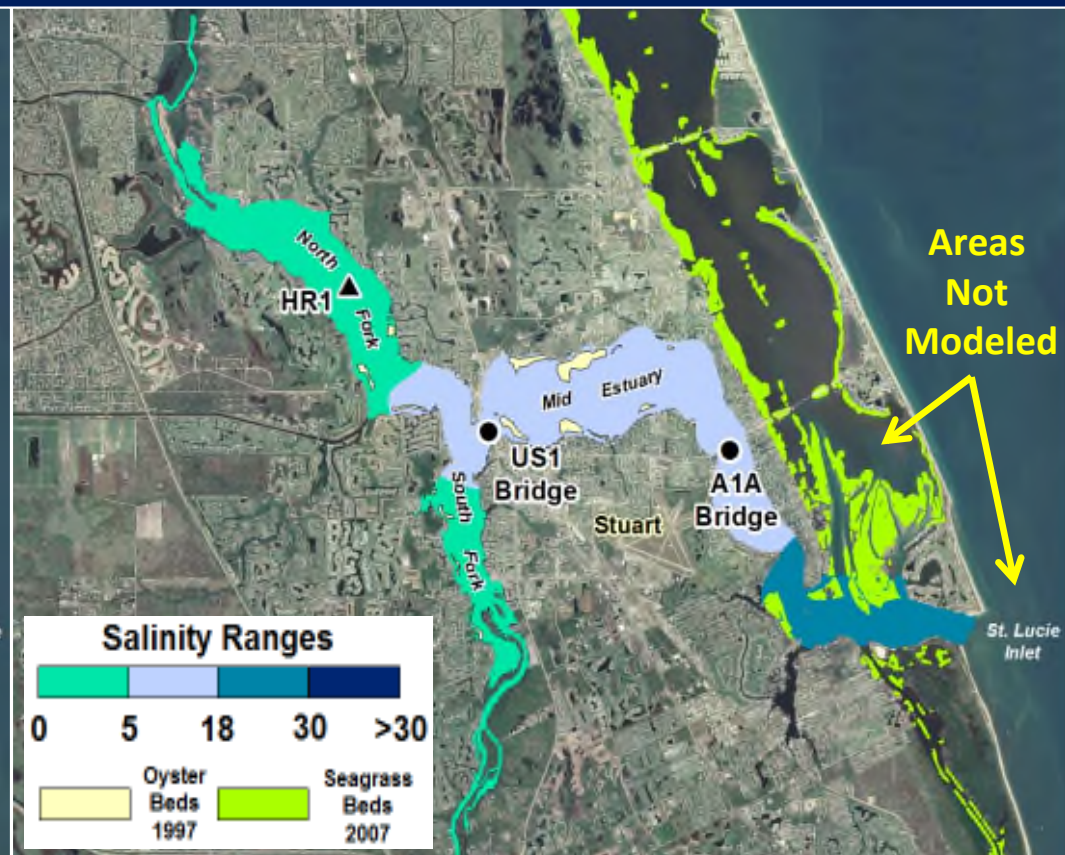
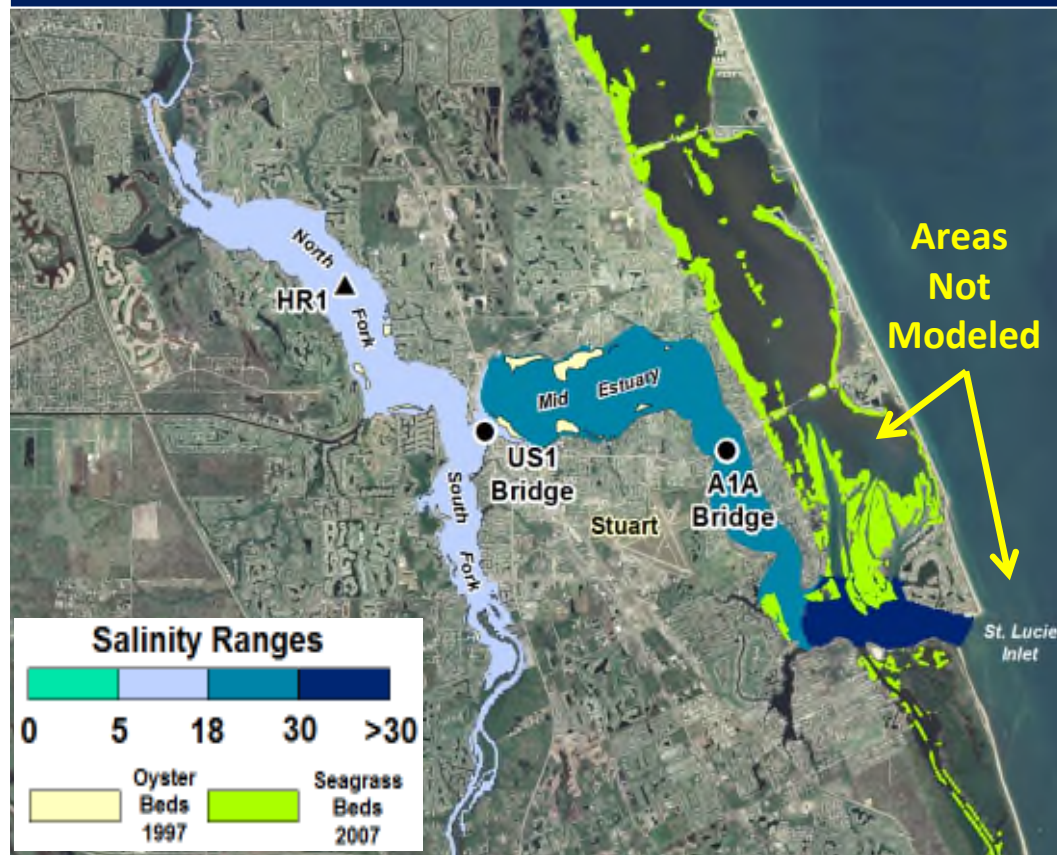


# ST. LUCIE ESTUARY

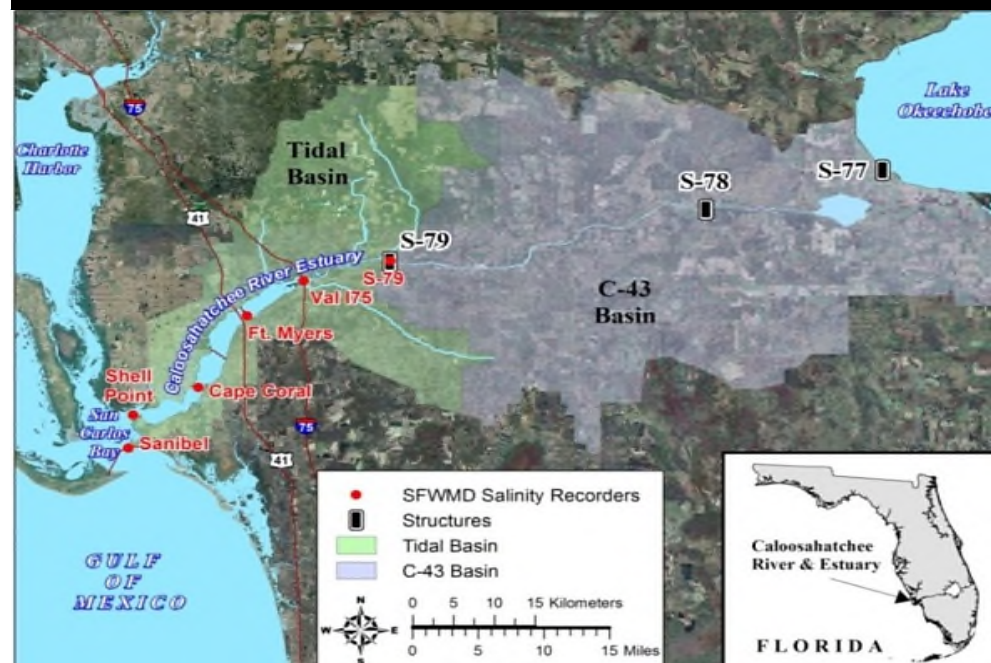
## Salinity Conditions

February 9, 2015

March 9, 2015

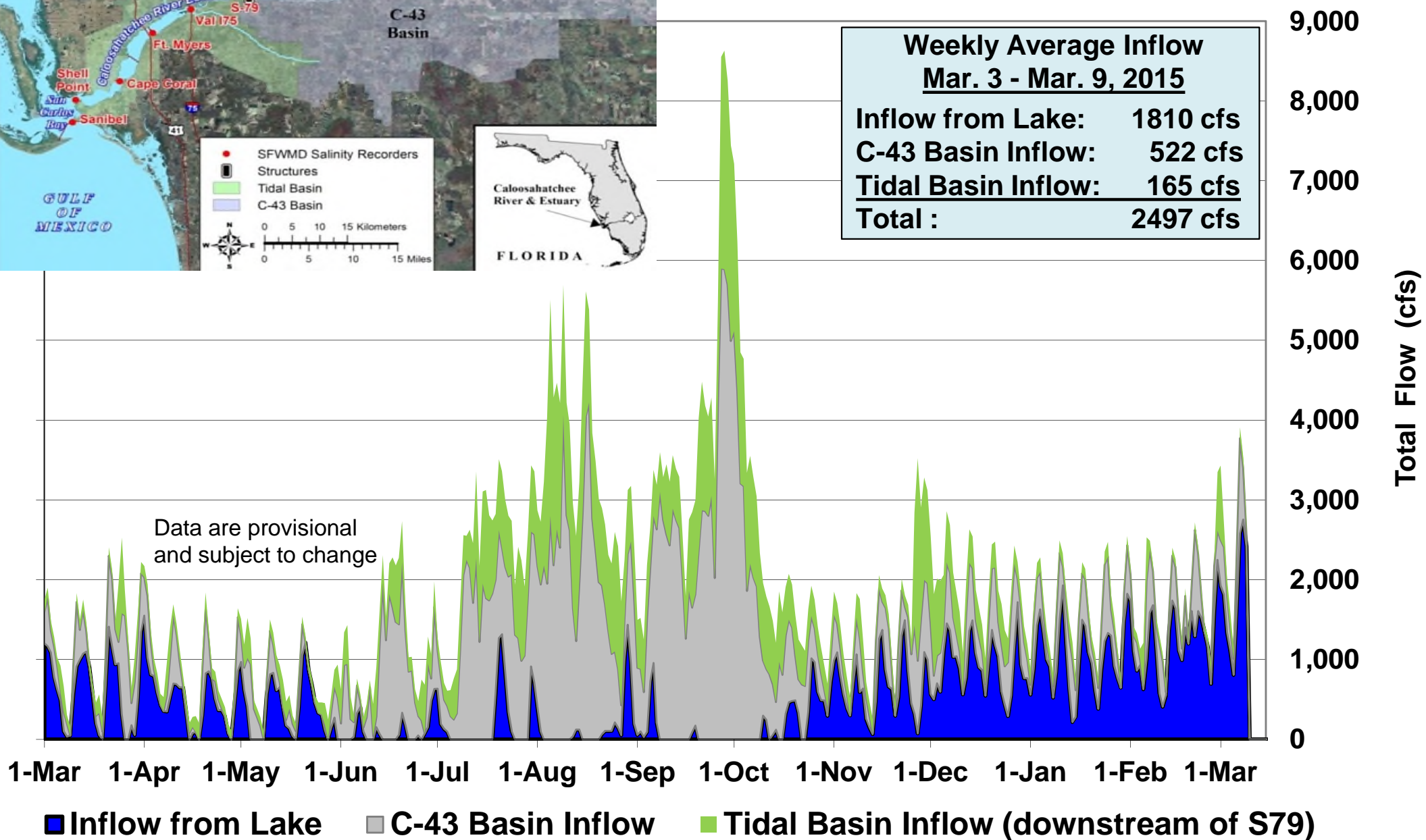


# CALOOSAHATCHEE ESTUARY



## Weekly Average Inflow Mar. 3 - Mar. 9, 2015

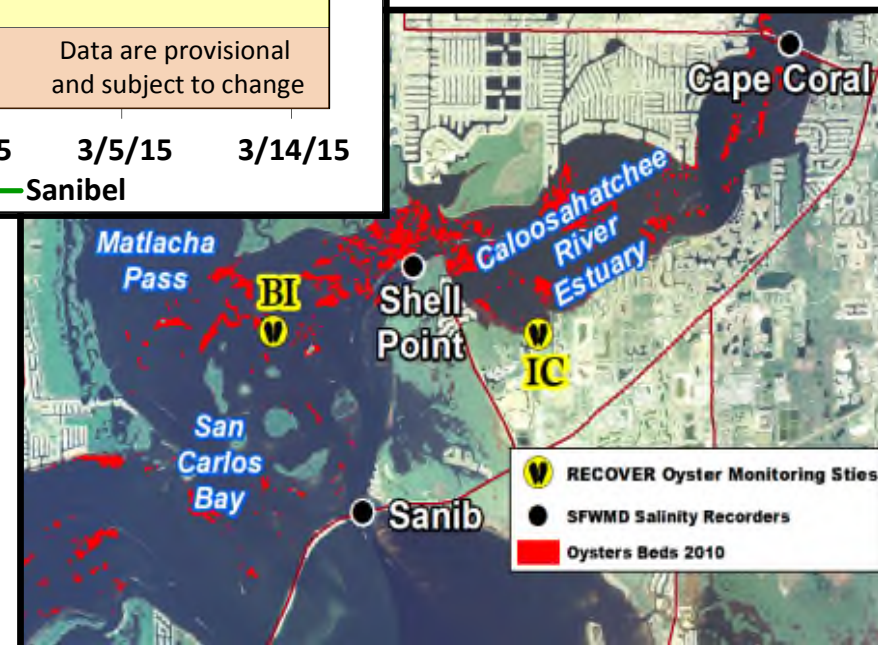
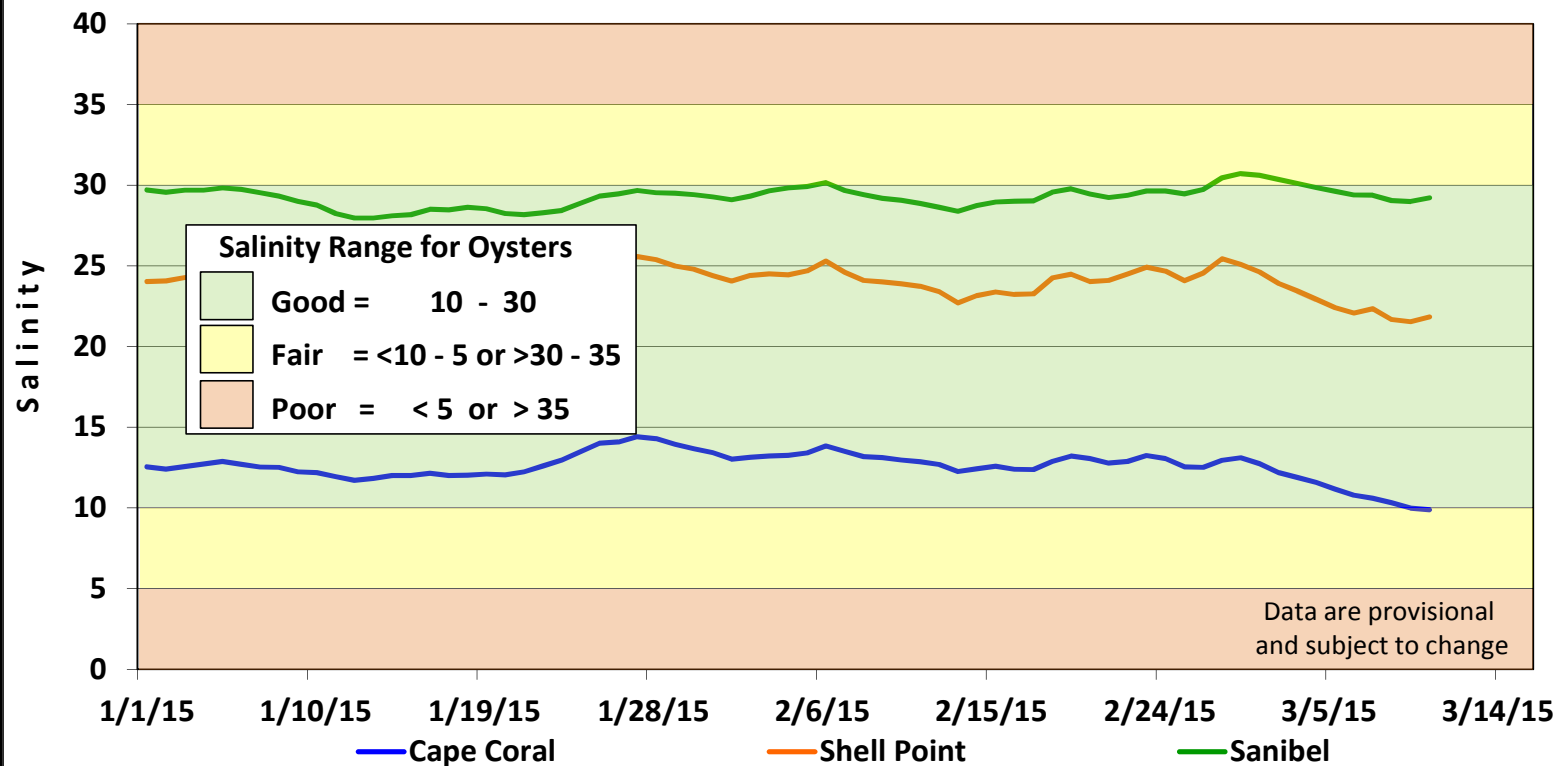
Inflow from Lake:	1810 cfs
C-43 Basin Inflow:	522 cfs
Tidal Basin Inflow:	165 cfs
<b>Total :</b>	<b>2497 cfs</b>





# CALOOSAHATCHEE ESTUARY - OYSTERS

Seven-day mean salinity of the water column at 3 monitoring stations in the Caloosahatchee Estuary



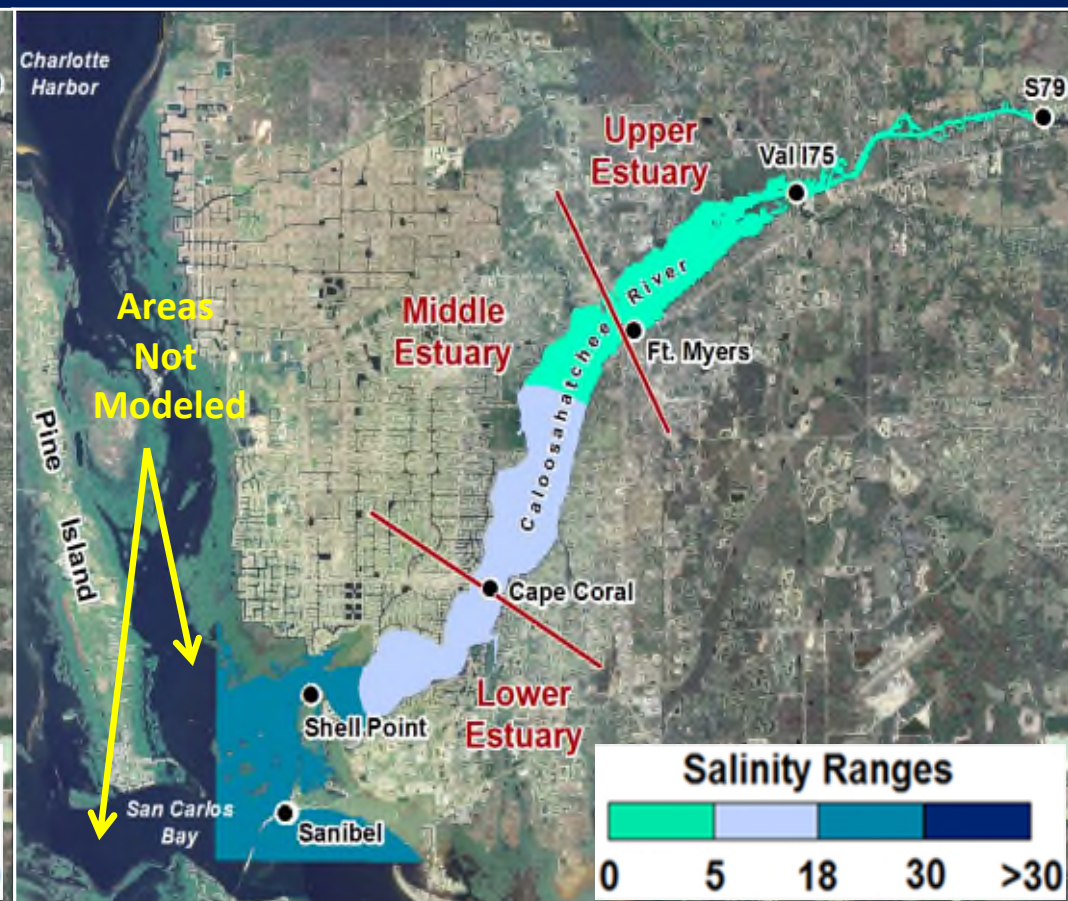
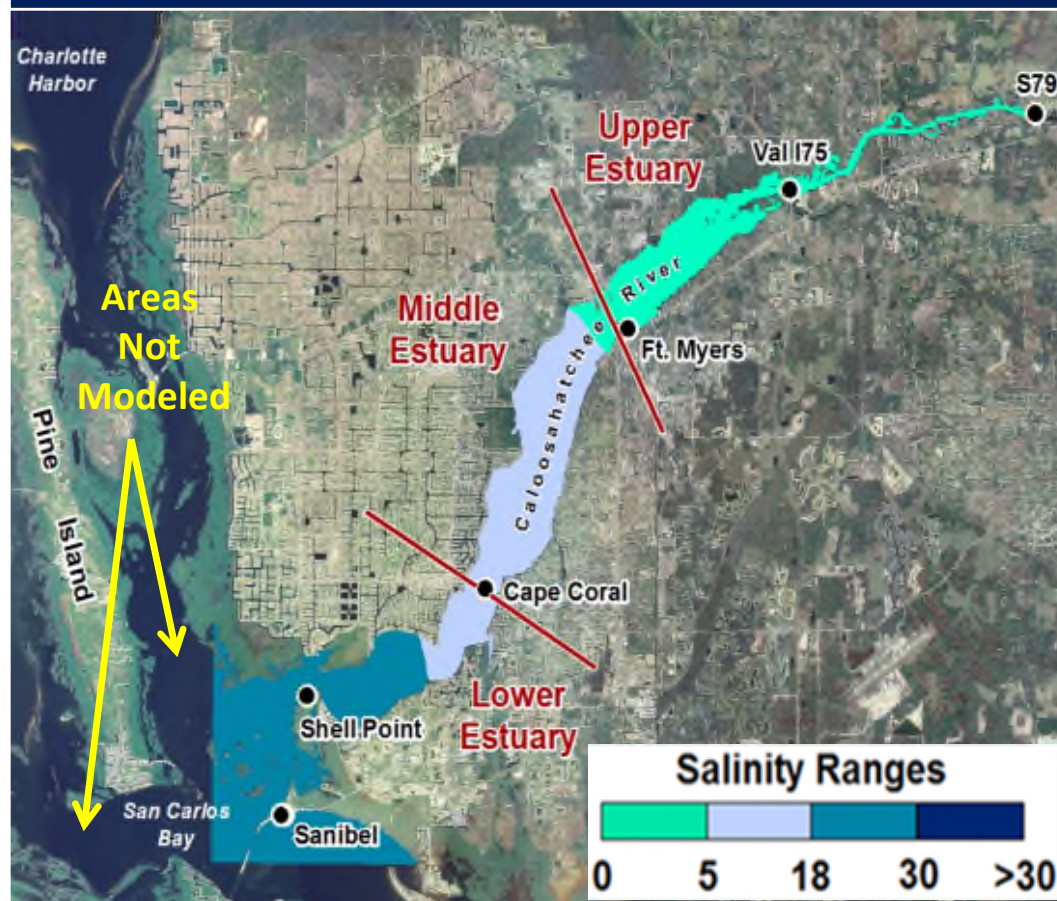


# CALOOSAHAATCHEE ESTUARY

## Salinity Conditions

February 9, 2015

March 9, 2015



# STORMWATER TREATMENT AREAS (STAs)

## CURRENT CONDITIONS

- STAs treated ~508,000 ac-ft of Lake Okeechobee Regulatory Releases (5/1/14 – 3/10/15)
- Snail Kite nesting in STA-1E (5 nests) & STA-5/6 (3 nests ) (3/7/15)
  - Restrictions on access & stage

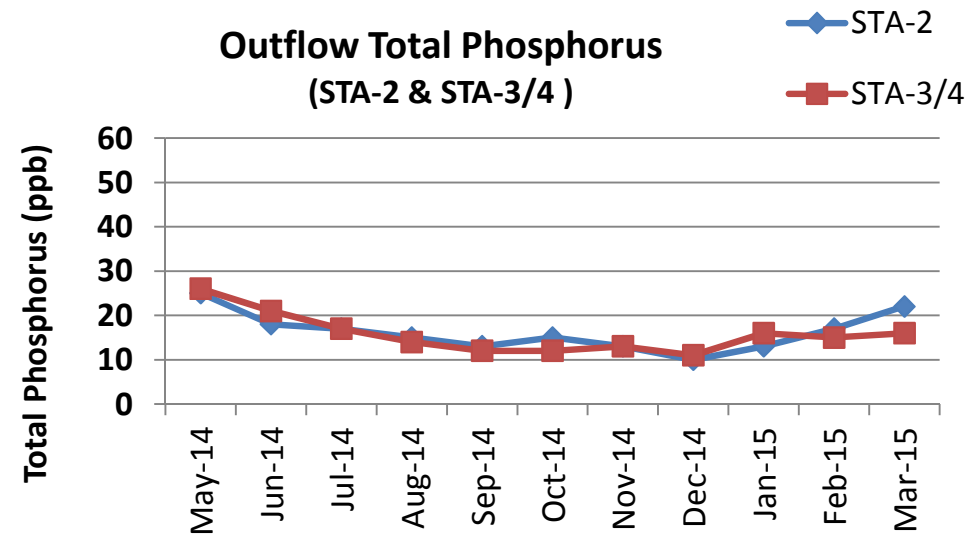
### Water Year 2015

Running Total: 5/1/14 - 3/8/15

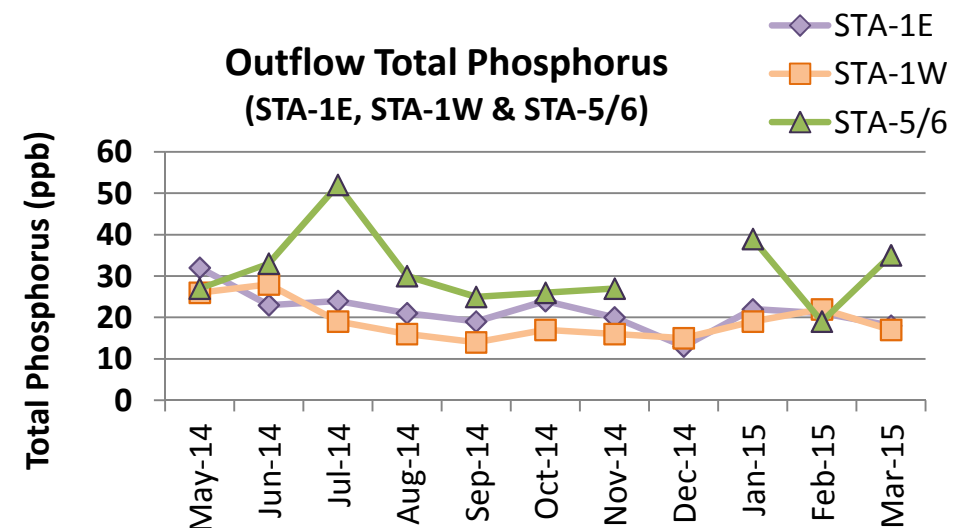
	STA-1E	STA-1W	STA-2	STA-3/4	STA-5/6 <sup>a</sup>
Inflow TP (ppb)	165	157	73	70	228
Outflow TP (ppb)	20	19	15	14	31
Inflow Volume (ac-ft)	100,615	132,045	471,767	420,722	65,807
Flows from Lake Okeechobee	49,700	49,200	223,500	186,400	800

Based on Preliminary Data

<sup>a</sup> = Lake Okeechobee flows to STA-5/6 were for water supply purposes.



Only the 1st week of March 2015 is shown



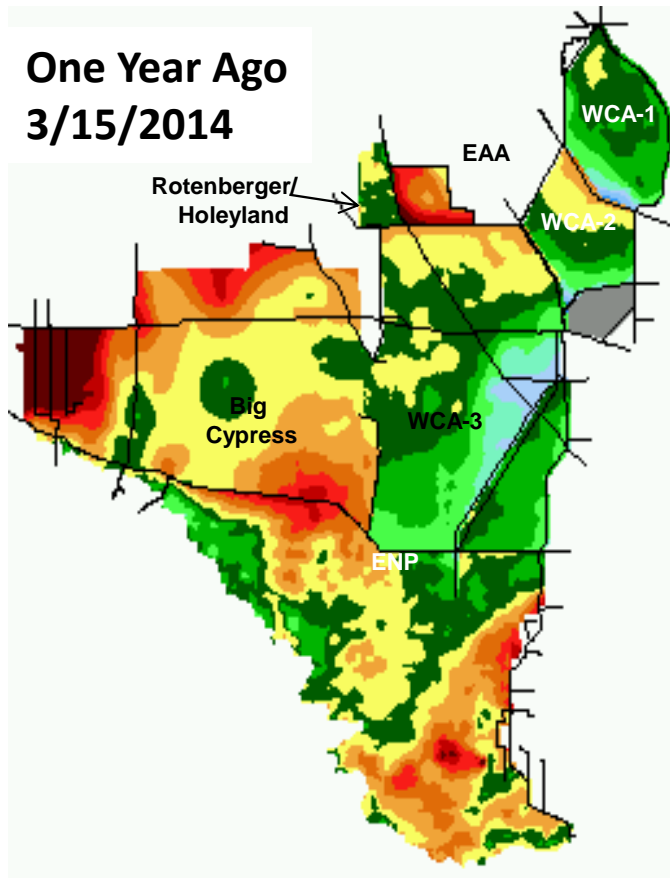
Only the 1st week of March 2015 is shown

Preliminary data shown

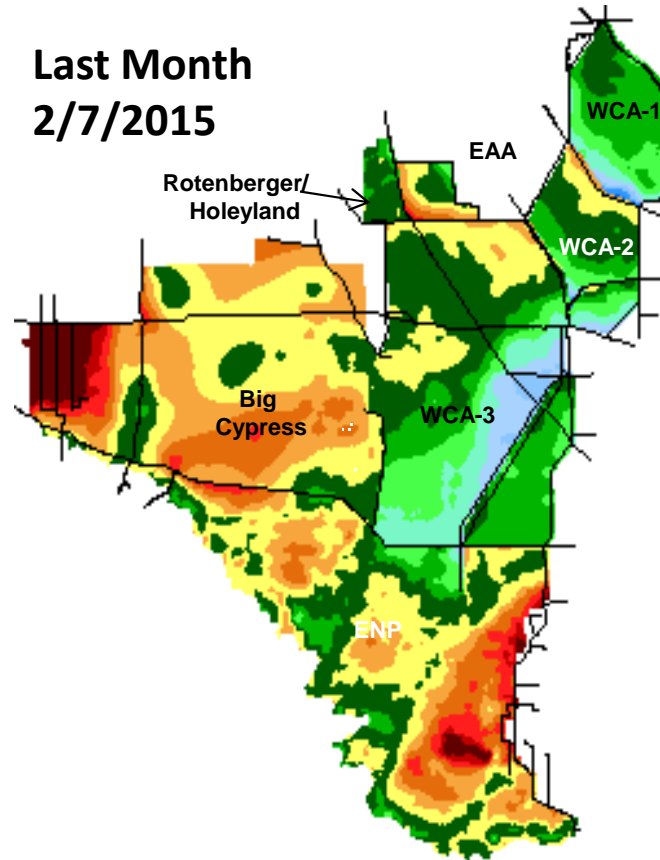


# GREATER EVERGLADES MONTHLY WATER DEPTH MAPS

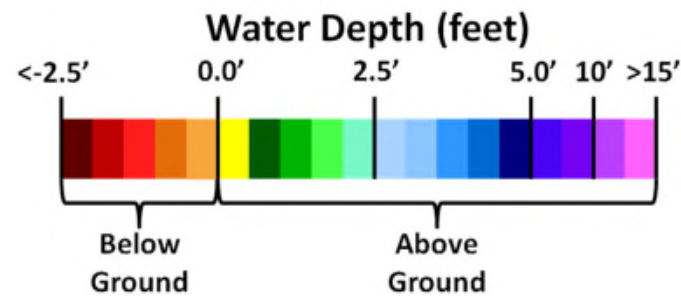
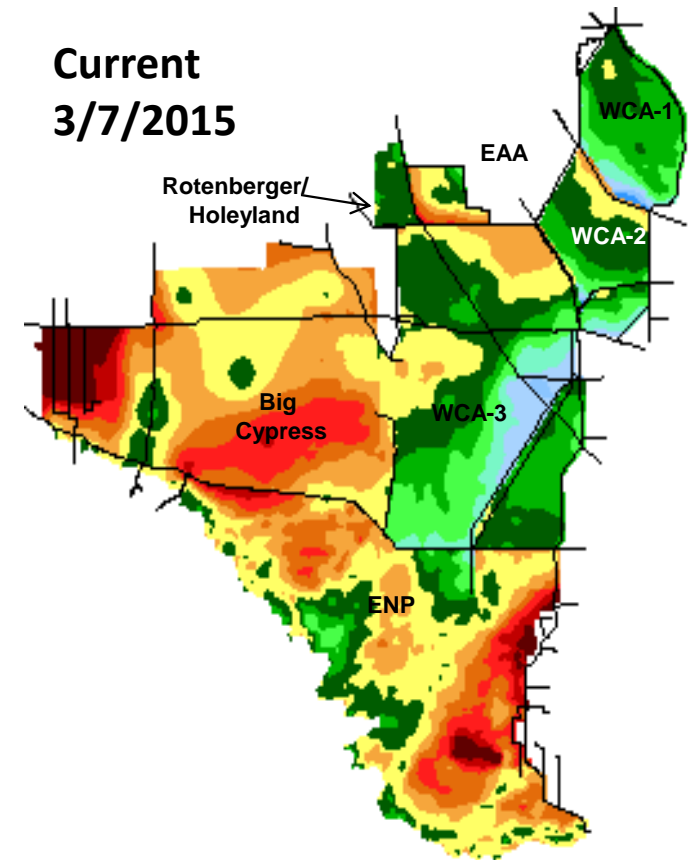
One Year Ago  
3/15/2014



Last Month  
2/7/2015



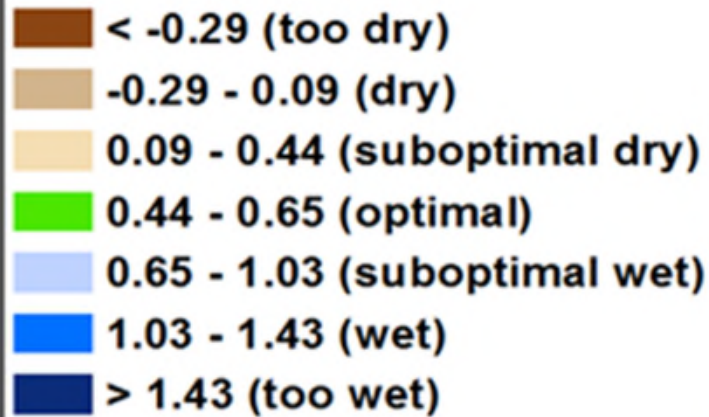
Current  
3/7/2015



# GREATER EVERGLADES MONTHLY WATER DEPTH MAPS

February 28, 2015

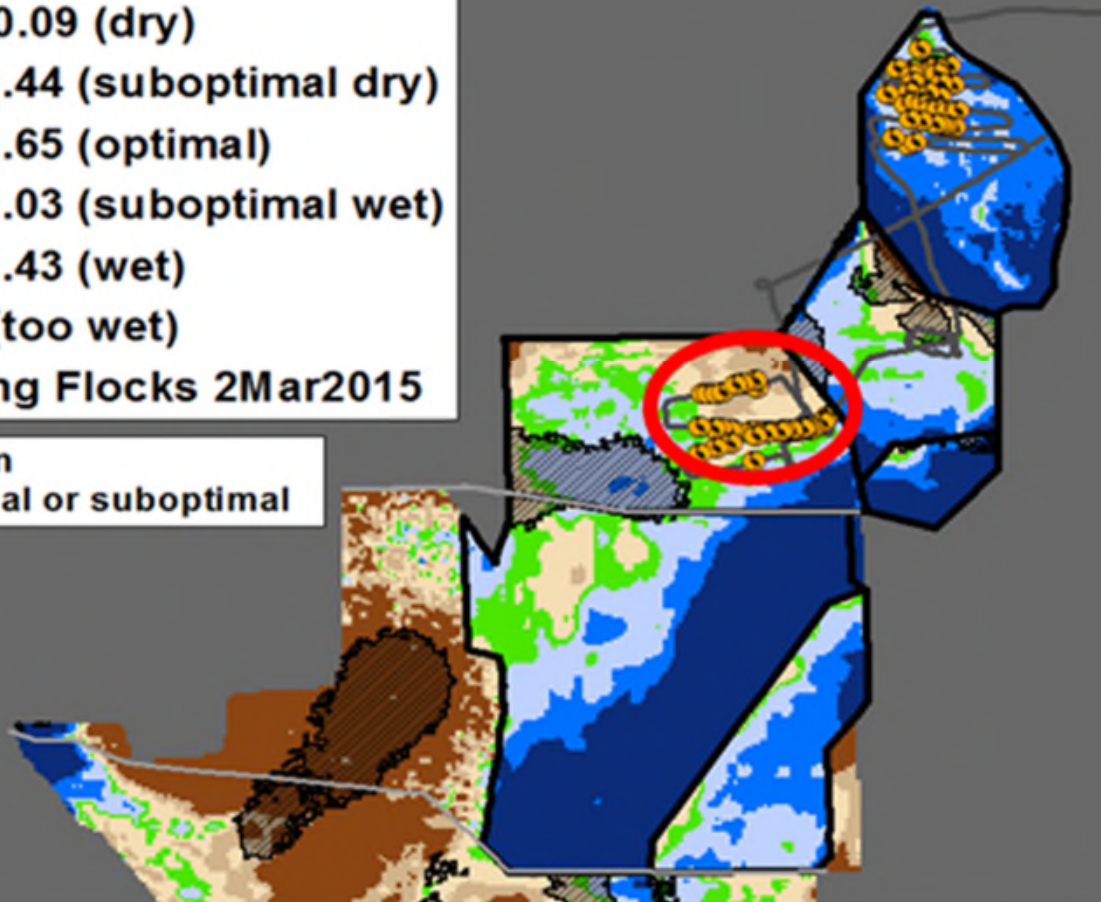
Water Depth (ft) v2



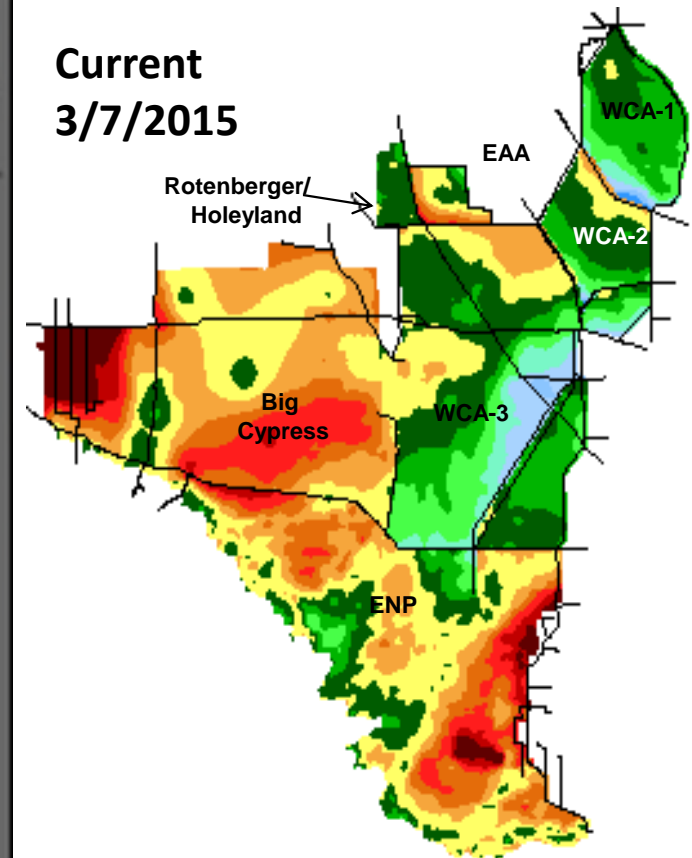
Foraging Flocks 2Mar2015

Recession  
Not optimal or suboptimal

— Roads  
□ Conservation Areas



Current  
3/7/2015



Habitat Suitability Map



## Habitat Suitability Map

February 28, 2015

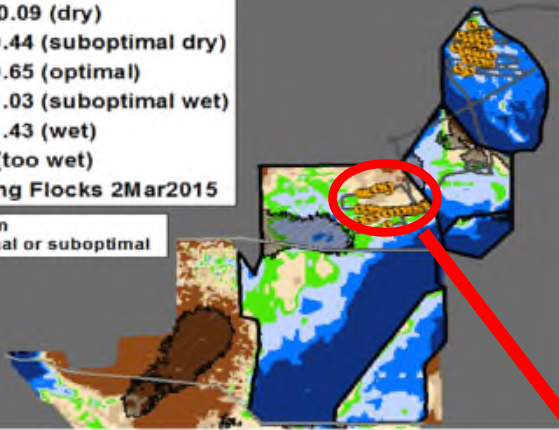
Water Depth (ft) v2

- < -0.29 (too dry)
- 0.29 - 0.09 (dry)
- 0.09 - 0.44 (suboptimal dry)
- 0.44 - 0.65 (optimal)
- 0.65 - 1.03 (suboptimal wet)
- 1.03 - 1.43 (wet)
- > 1.43 (too wet)
- Foraging Flocks 2Mar2015

Recession  
Not optimal or suboptimal

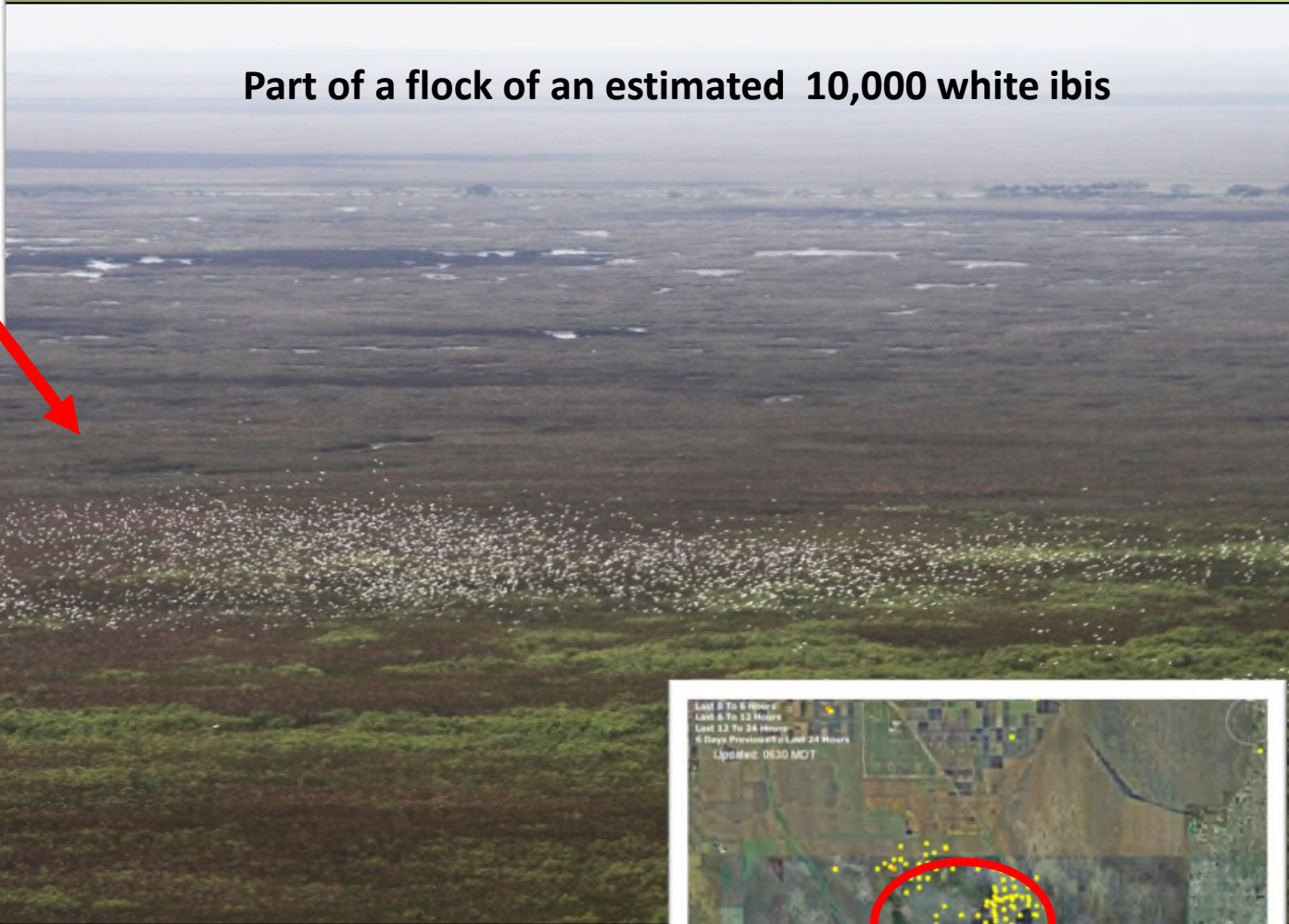
Roads

Conservation Areas

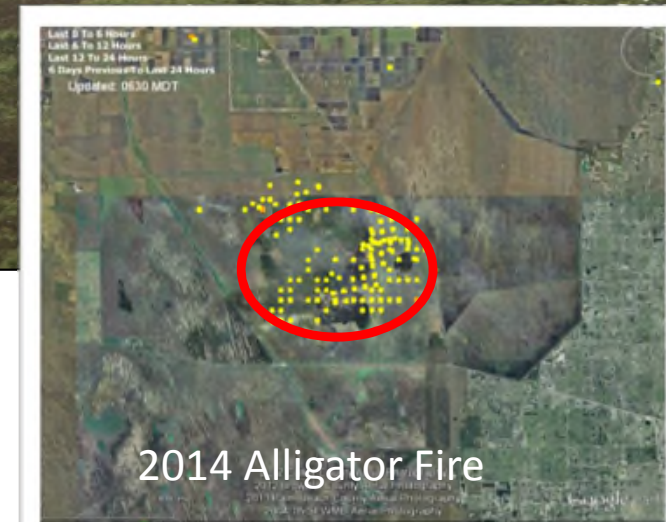


# EXCEPTIONALLY LARGE NUMBERS OF WHITE IBIS ARE FEEDING IN NE WCA-3A

Part of a flock of an estimated 10,000 white ibis

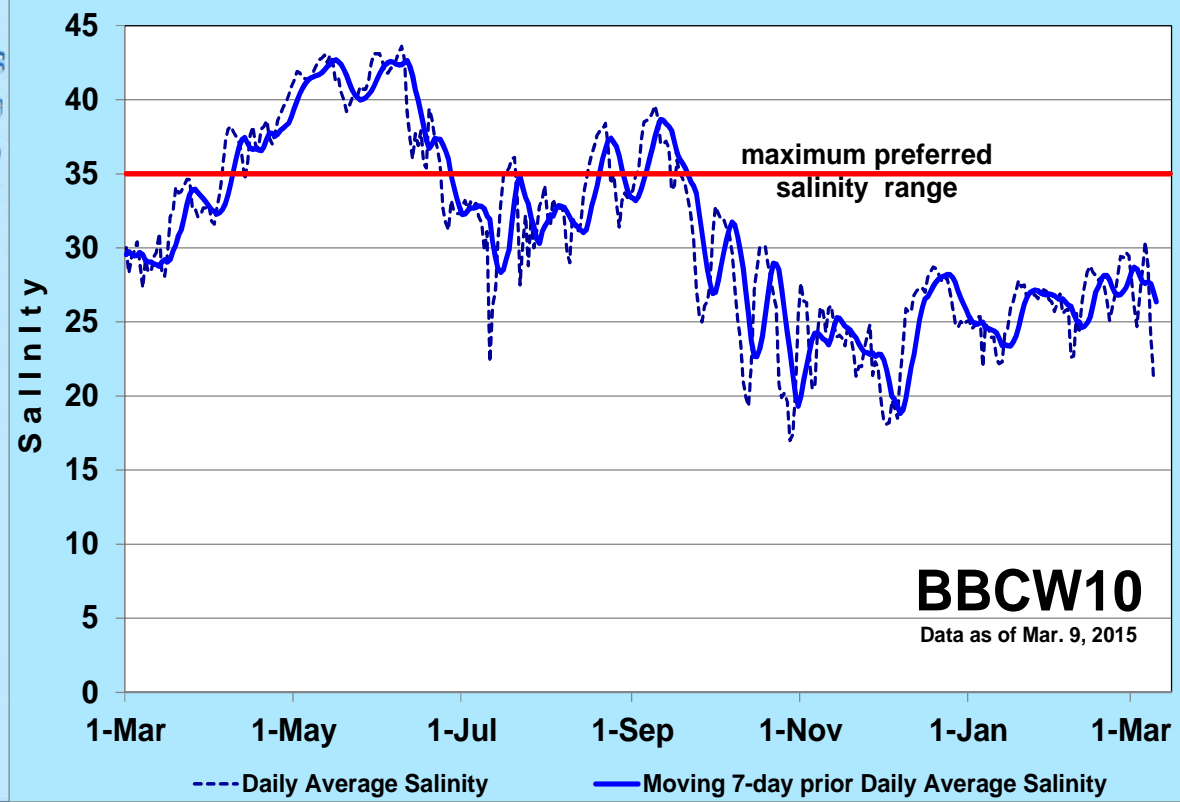
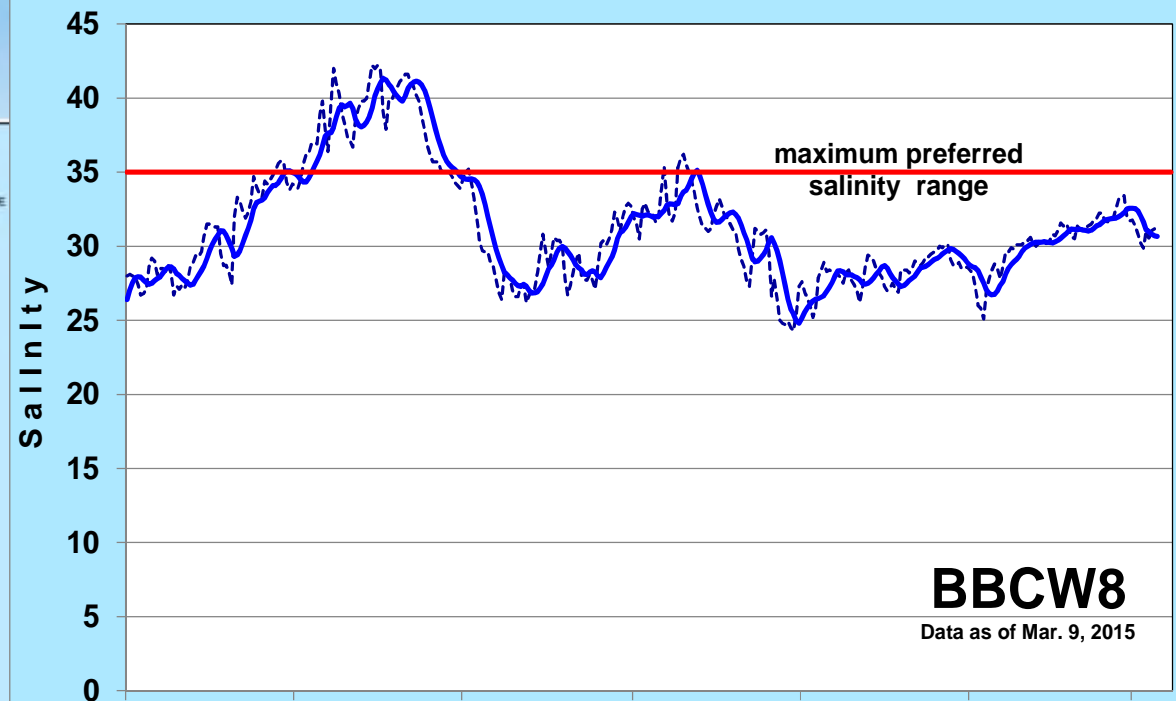
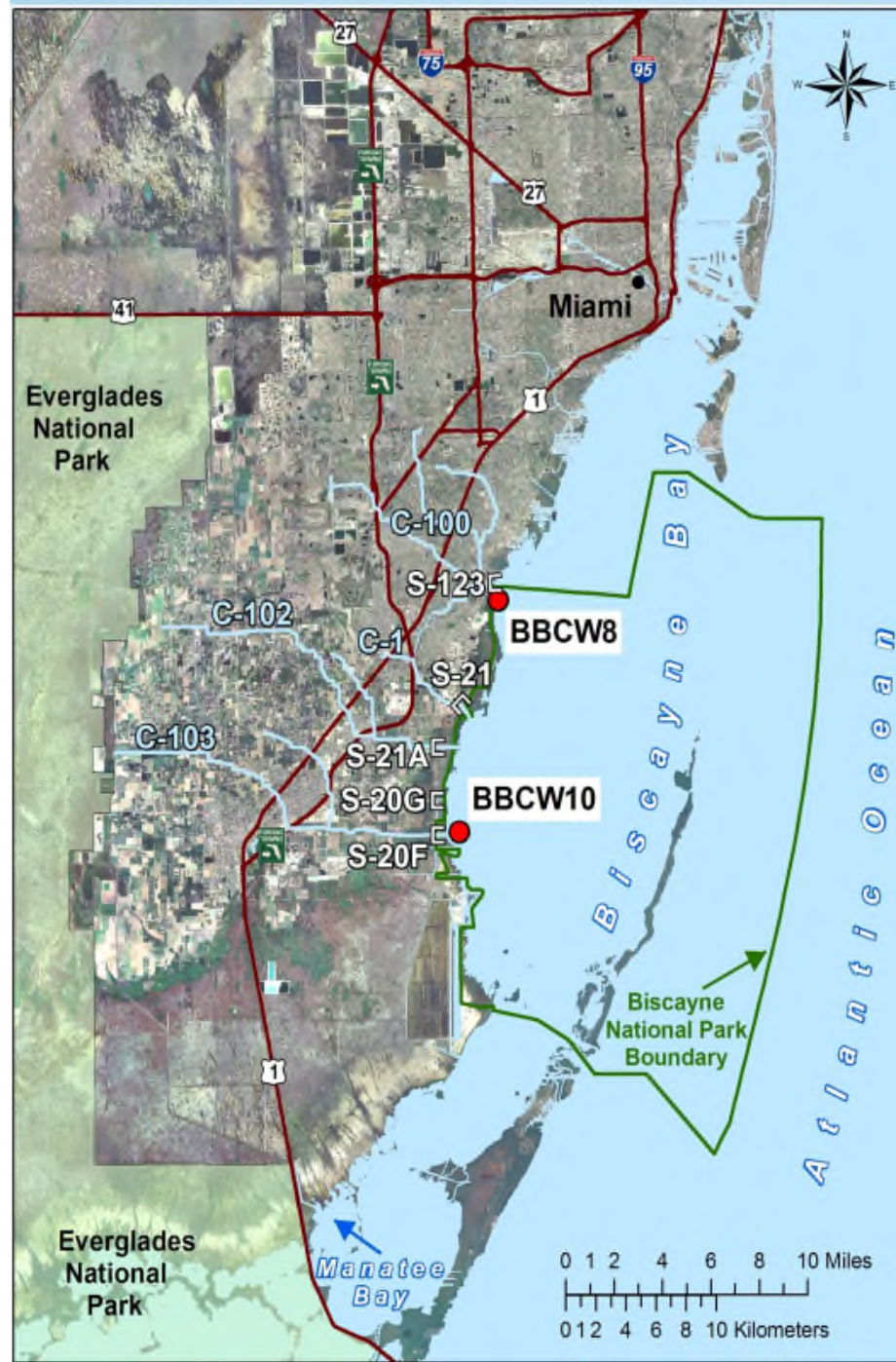


Good hydrology plus last year's 70,000 acre fire may be the reasons why more wading birds are foraging here than ever before.





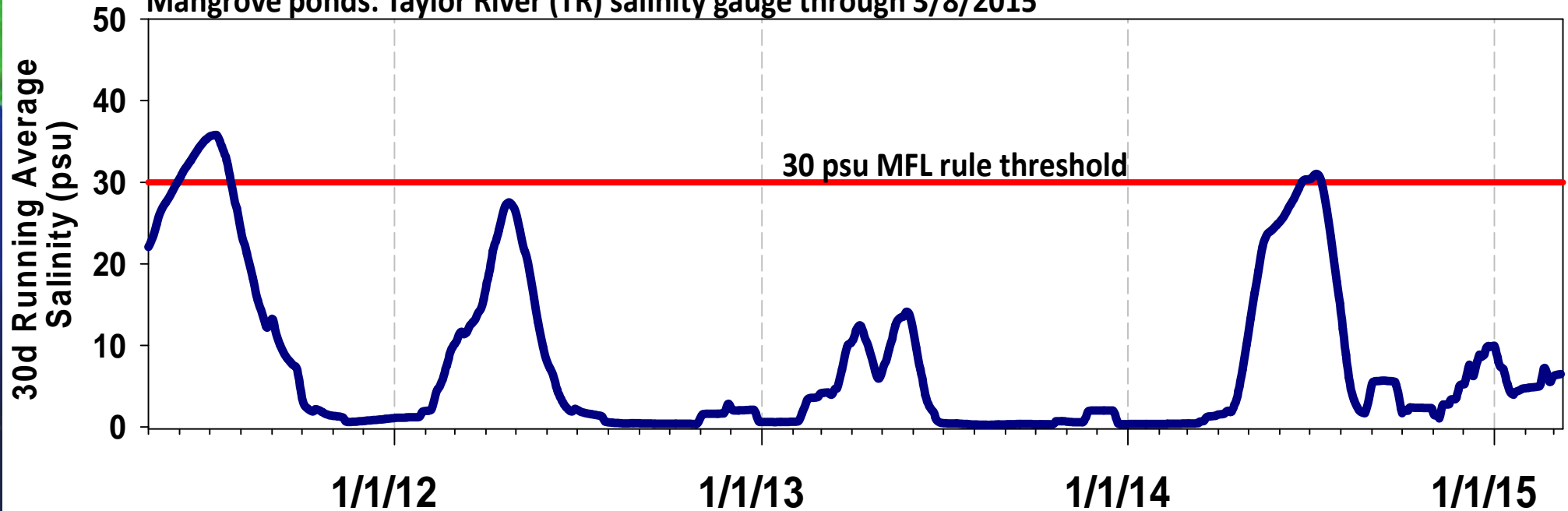
## BISCAYNE BAY SALINITY





# FLORIDA BAY SALINITY UPDATE

Mangrove ponds: Taylor River (TR) salinity gauge through 3/8/2015



Florida Bay MFL salinity threshold was exceeded in June - July of 2014

TR

- ★ Salinity gauge
- ✦ Creek flow gauge

**THANK YOU**

